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14. ABSTRACT The ability of a nation to deliver adequate defence for its citizens (Defence) relies on successfully navigating a complex web of interactions between numerous people, nations, and institutions. Debate on how to optimize those interactions has long been of interest to those involved in UK Defence. To help clarify and settle some of those debates, this thesis analyzes the most recent set of UK Defence reforms. The 2010 Strategic Defence and Security Review (SDSR) directed major cuts to both personnel and equipment within the Ministry of Defence (MoD). SDSR 10 went some way to address the £38Bn deficit in UK Defence procurement, but the UK Secretary of State for Defence charged Lord Levene with rationalizing an unaffordable program to prevent recurrence. The 2011 Levene Report unfortunately focused on the symptoms of the problem rather than the root cause. Levene concentrated on making sure things were done right rather than doing the right things, charging the latter to the SDSR. The outcome of the SDSR 15 would suggest not all the shortcomings have been addressed. The two most expensive UK equipment programs effectively lock in almost half of the available equipment budget and present considerable risk to a balanced capability. Ironically, Levene undermined his own intent through the reduction of MoD Head Office's capability to mitigate risk and make hard decisions. Furthermore, Levene weakened the vital aspect of MoD business to react to changes in economic fortune. The RAF mantra to be "agile, adaptable, and capable" is the polar opposite to the procurement process. The ability to prioritize a constrained budget to provide a well-balanced capability points to the need for clear and comprehensive strategy. Based on the shortfalls identified, this thesis offers a set of recommendations to improve Defence Reform through the bolstering of institutional strategic thinking and planning.					
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JOINT FORCES STAFF COLLEGE

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**THE STRATEGIC FAILURE OF UK DEFENCE REFORM AND
WHAT STILL NEEDS TO BE DONE**

by

Andrew Scott Beasant

Wing Commander, Royal Air Force

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A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense.

This paper is entirely my own work except as documented in footnotes.

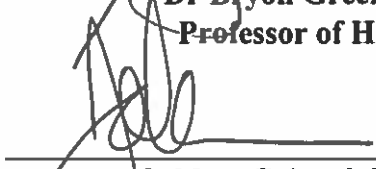
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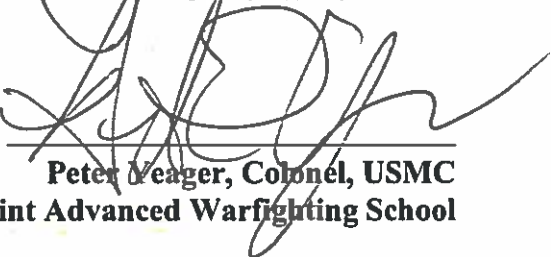
Date: 02-14-2016

Thesis Advisor:

Signature: 
Dr Bryon Greenwald
Professor of History

Approved by:

Signature: 
James Golden, Colonel, USAF
Committee Member

Signature: 
Peter Yeager, Colonel, USMC
Director, Joint Advanced Warfighting School

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ABSTRACT

The ability of a nation to deliver adequate defence for its citizens (Defence) relies on successfully navigating a complex web of interactions between numerous people, nations, and institutions. Debate on how to optimize those interactions has long been of interest to those involved in UK Defence. To help clarify and settle some of those debates, this thesis analyzes the most recent set of UK Defence reforms. A £38Bn deficit in UK Defence procurement instigated Lord Levene's 2011 report that intended to make recommendations that would prevent recurrence. The outcome of the 2015 Strategic Defence and Security Review would suggest not all the shortcomings have been addressed. Based on the shortfalls identified, this thesis offers a set of recommendations to improve Defence Reform through the bolstering of institutional strategic thinking and planning.

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DEDICATION

I dedicate this thesis to all those that have lost their lives because of strategic failure in Defence procurement.

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CHAPTER 1: INTRODUCTION

The UK Ministry of Defence (MoD) is undergoing a period of significant Defence Reform as recommended by the 2011 Levene Report whilst simultaneously implementing the 2015 Strategic Defence and Security Review (SDSR) designed to improve the wicked problem of Defence delivery.¹ Both require an enormous level of activity from the MoD, which distracts attention from the collective strategic failure of Defence Reform as a whole. The Levene attempt at Defence Reform failed to prioritize the importance of strategic decision making, leading to the first real test, SDSR 15, introducing avoidable risk to national security. History repeatedly emphasizes that a failure to understand the limitations that shape strategy leads to great difficulty in coherently achieving end states.

The Levene Report, by its own admission, did not go far enough because it failed to tackle the problem as a whole, which required understanding the context of Defence Reform, the impact of strategic programs, the economic context, and the political relationship vis-à-vis the UK's approach to strategy. This thesis makes recommendations to enable the MoD to generate a balanced strategy and bolster its influence on policy to achieve end states coherently through better understanding of the economic and political limitations.

¹ The Levene Report is a commonly used reference to the reports official title - Ministry of Defence. *Defence Reform: An Independent Report into the Structure and Management of the Ministry of Defence*, by Lord Levene. The Stationary Office Limited. (London, 2011)

Defence Reform

In 2010, the UK Secretary of State for Defence charged Lord Levene with rationalizing an unaffordable program without distracting from delivering the capabilities that the country needed. Unfortunately, the changes he recommended to the management and organization of the MoD focused on the symptoms of the problem rather than the root cause. Levene concentrated on making sure things were done right rather than doing the right things, charging the latter to the SDSR.² It is clear that if the MoD makes the wrong strategic decision, attempting to rectify that issue downstream becomes infinitely harder. One recommendation of the Levene report was to “make the MoD Head Office smaller and more strategic, to make high level balance of investment decisions, set strategic direction and a strong corporate framework, and hold to account.”³ The subsequent implementation of this recommendation saw the disaggregation of the majority of the Head Office personnel to the Front Line Commands, but the control of nuclear deterrent and Carrier Enabled Power Projection (CEPP) remained centralized. Keeping the strategic programs within a smaller sized Head Office reduces the intellectual horsepower to both identify and fix the problems of strategic programs. This increases the risk of cost inflation and time delays, which in turn applies yet more pressure on the Service Chiefs, who are left to provide the bulk of UK Defence from an even smaller budget. The report remained focused on management and organization to attempt to reinforce the ability to deliver strategic programs efficiently, rather than

² Thanks go to Dr Greenwald for summarizing this point so aptly during a discussion.

³ Ministry of Defence. *Defence Reform: An Independent Report into the Structure and Management of the Ministry of Defence*, 4.

strengthening the management and organizational ability to make coherent strategic decisions.

Impact of Strategic Programs

The two most expensive UK equipment programs are the replacement of the nuclear deterrent and CEPP capability, which effectively lock in almost half of the available equipment budget as it stands today. The national debate over the country's need for nuclear deterrent and CEPP is extensive, but ultimately the strategic direction tries to deliver both.⁴ Due to the likely cost growth of these strategic programs and the slow increase in real terms of available budget, the greater freedom desired for the Service Chiefs will be constrained by a limited budget both in real terms and as a percentage of the overall MoD budget. Ironically, Levene undermined his own intent through the reduction of MoD Head Office's capability to co-ordinate and make hard decisions, which increased the risk of debilitating cost growth and, consequently, reduced flexibility for the Service Chiefs to deliver programs efficiently. The current situation increases the difficulty for the Service Chiefs to meet the intent of achieving an affordable and balanced delivery of Defence and increases the UK's risk of failing to achieve its strategic objectives.

MoD's poor strategic decisions led to incoherent strategic planning and created frustrations for the Service Chiefs. The decision to remove the Maritime Patrol Aircraft (MPA) in SDSR 10 and then restore it in SDSR 15 provides the most palpable example. Further, the reversal of the SDSR 10 decision to change from the Short Take-Off and Vertical Landing (STOVL) variant of the F-35 Joint Strike Fighter (JSF) to the Carrier

⁴ United Kingdom. HM Government. *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*. (London, 2010), 5.

Variant (CV) occurred less than two years later, creating significant tension between the Royal Air Force (RAF) and Royal Navy (RN). The rapid change of major platforms has proven lengthy and expensive, and avoiding a repeat of this folly in the execution of SDSR 15 will be of keen interest to the Service Chiefs.

The Economic Context

The MoD is at a crucial stage of implementing change and making decisions in order to prepare for contingent operations and maintain relevance on the world stage. The ability to react to changes in economic fortune remains a vital aspect of MoD business. The RAF mantra is to be “agile, adaptable and capable”, but the acquisition process is the polar opposite of this. Major procurement programs across Defence take on the order of decades to deliver due to the increasing complexity (both real and manufactured) of platforms and predilection to alter requirements post-contract that are expensive, time-consuming, and generally result in a less capable, costlier, delayed output. At the other end of the scale, the MoD Urgent Operational Requirement (UOR) process delivers quickly, but is expensive and unsustainable. The ability to provide an agile, adaptable, and capable MoD lies somewhere in between the current lengthy procurement process and the rapid UOR process.

Politics and UK Approach to Strategy

Given its current security threats, the UK will most certainly require a much wider portfolio beyond nuclear deterrent and CEPP. An uncertain future operating environment is not new and the responsibility for ensuring mission success through a well-balanced capability lies with the Service Chiefs. The ability to prioritize a constrained budget to provide a well-balanced capability points to the need for clear and comprehensive

strategy. The UK's highest level of announced strategy comes from the National Security Strategy (NSS). The 2010 NSS hailed the formation of the National Security Council (NSC) as a "strategic tipping point," but critics heavily disparaged the true strategic content of the NSS and the role of the NSC for its lack of strategic thinking when compared to the U.S. equivalent.⁵ The political direction of "doing the same with less" sidesteps the reality of hard choices and leads to incoherence. After the SDSR in October 2010, Prime Minister David Cameron announced that Britain would accept "no strategic shrinkage" in its global and national responsibilities.⁶ A political refusal to accept strategic shrinkage fixes the ends that the military has to meet and adds further pressure to a defence establishment hamstrung by a broken procurement process and a constrained budget.

Political statements of no strategic shrinkage and fixed personnel levels from SDSR 15 provide a very clear challenge for the MoD. Fixed personnel levels and increased major program costs expand "non-discretionary" defence spending and reduces the available remaining budget provided to Service Chiefs. The lack of a comprehensive strategy, and institutional support to it, exacerbates the problem by providing ambiguous direction, which, in turn, makes prioritization politically difficult. Subsequently, the temptation for the MoD is to generate too many programs in the short-term to satisfy as many ends as possible, rather than accept fewer more focused programs that meet prioritized ends. This temptation, or "over-heating of the program" as Levene described it, precisely contradicts the intent of Defence Reform. Levene abdicated responsibility

⁵HM Government. *A Strong Britain in an Age of Uncertainty: The National Security Strategy*. United Kingdom (London, 2010), 3.

⁶ The Economist, "A retreat, but not a rout," October 21 2010, <http://www.economist.com/node/17316591>, (accessed April 1, 2014).

for strategic decision making to the SDSR process, but accepted responsibility to change the organization and management of the MoD. Levene concentrated on bolstering Front Line Commands (FLCs) to empower Service Chiefs, rather than strengthening the MoD Head Office and support to the National Security Council that would have given institutional backing to the development and implementation of comprehensive strategy. Ultimately, Defence Reform has weakened the relationship between politician and commander, encouraging the efficient delivery of flawed strategy—the very root of the problem.

CHAPTER 2: DEFENCE REFORM

In August 2010, the UK Secretary of State for Defence asked Lord Levene to chair a Defence Reform Steering Group to tackle an over-heated fiscal program within the MoD. The Levene Report recommended a series of root and branch reforms, arguably the first since the recommendations of *The Central Organisation for Defence White Paper* in 1984, a time with a distinctly different institutional, financial, and operational context. During the Cold War, the MoD faced a well-defined and understood foe; since then the threats to the UK have become less defined and predictable, all against a backdrop of increasing austerity.¹

The Levene Report focused on the management of the MoD in order to provide a framework to deliver affordable capability by reducing running costs and ensuring value for money from the available budget.² Levene did not see specific saving measures as the principal objective for this report, with the output of the SDSR regarded as the more appropriate avenue.³ Instead, he analyzed how MoD organized and managed itself and recommended some changes, leaving the alignment of strategic end states with military ways and means to the SDSR. Sadly, to many the SDSR of 2010 did not go far enough to redress the £37.3 billion deficit in the Defence budget.⁴ At the time, the MoD faced a period of intense reform on the back of SDSR 10 with the expectation that further

¹ Ministry of Defence. *Defence Reform: An Independent Report into the Structure and Management of the Ministry of Defence*, 4.

² Ibid., 6.

³ Ibid.

⁴ The coalition Government inherited the debt from the previous Labour Government, see HM Government, "Defence Secretary Balances MoD Budget," <https://www.gov.uk/government/news/defence-secretary-balances-mod-budget> (accessed 8 Dec 15).

difficult decisions would be required in SDSR 15 in order to address the problem of affordability.

Furthermore, the Levene report did not go far enough to rectify the causes of an overinflated Defence budget. Unfortunately, there is little literature available to identify the specific factors that could address the source of these budget concerns. Whilst the ongoing process of reforms, not to complete until 2020, makes identification of specific factors difficult, Levene does provide annual update reports. However, Levene's reports, although welcome, are problematic because his group assesses the reforms without external auditors and perspective. The single published article that acknowledges Levene's work argues that his report made such a detailed identification of MoD's problems that the recommendations slipped by without much attention.⁵ The organizational efficiencies advocated in the Levene Report reduce, to some extent, the over-heated program, but the more critical and enduring issue is having a geo-strategic culture where ambitions do not match the resources.⁶ In fact, bureaucratic tendencies toward reductionism enabled committees and working groups to only focus on aspects of the problem rather than holistically addressing key issues, meanwhile budget concerns persist.

Levene's recommendation to create a culture of responsibility and accountability that causes a paradigm shift from bureaucracy to empowerment is an enticing and truly transformational goal, but it requires a number of enablers that have proven difficult to achieve in the past within the MoD. The introduction of SMART Defence initiatives

⁵ Michael Dunn, "From Defence Reform to Defence Transformation," *RUSI* Vol. 156, No. 5 (October 2011): 14.

⁶ *Ibid.*, 15.

attempted to give more responsibility and accountability to the team leaders of programs. However, military leaders considerably eroded these powers as the programs became stove-piped and incoherent.⁷

Two key recommendations from the Report were:

1) Make the MoD Head Office smaller and more strategic, to make high level balance of investment decisions, set strategic direction and a strong corporate framework, and hold to account.⁸

2) Focus the Service Chiefs on running their Service and empower them to perform their role effectively, with greater freedom to manage, as part of a much clearer framework of financial accountability and control.⁹

The result of these recommendations initiated removal of over 500 personnel, over 20%, from the MoD Head Office, of which 120 military capability planning posts went to Front Line Commands in support of the Service Chiefs.¹⁰

Levene's Annual Update Reports

The intent of the Levene Report was to overcome centralist tendencies and empower Service Chiefs; however the retention of fiscal powers and the rise in bureaucracy caused concern when Levene delivered his first annual update report.¹¹ Levene was concerned that the transfer of financial approval from Head Office to the Service Chiefs had not yet been fully implemented and did not allow an accurate judgement of the efficacy of the new model. He also noted that the burden of reporting by the Service Chiefs to the Head Office could consume disproportionate staffing

⁷ Ibid.,16.

⁸ Ministry of Defence. *Defence Reform: An Independent Report into the Structure and Management of the Ministry of Defence*, 4.

⁹ Ibid.

¹⁰ Ministry of Defence, "Defence Reform – Second Annual Review," 13 November 2013.

¹¹ Ministry of Defence, "Defence Reform Steering Group – First Annual Report," 30 November 2012.

capacity that would negate the greater freedoms desired. Levene praised the MoD in his second annual update report for the progress made towards achieving the decentralized intent, but acknowledged the centralized basis required for SDSR 15, with the challenge being to return to the delegated model once it was complete. The second report also specifically identified the Strategic Programs that remained centralized and which required further clarity of roles between Front Line Commands (FLCs) to resolve disputes.¹²

Indications of Levene's intent for Service Chiefs to focus on their own Services are positive, but the ability of the Head Office to provide strategic direction has been less successful. The third and final annual update report again praised the progress made on his recommendations, but identified two emerging areas that caused concern—'real' world funding and political pressures.¹³ A chief concern was that Head Office was using FLCs that created prudent savings to offset other FLCs that had overspent, creating a disincentive for frugal Service Chiefs. Levene welcomed the creation of a Head Office Management Group to provide focus and co-ordination between FLCs, but accepted there was some way to go to reinforce the leadership role.¹⁴ Levene identified the Chief of the Naval Staff as having the biggest restriction on flexibility due to the constraints applied by nuclear deterrent and shipbuilding, but *hoped* that this would improve with time and designated SDSR 15 as the opportunity to tackle the problem.

In his final report, as he did in previous reports, Levene suggests tackling the major fiscal burdens using SDSR 15, but in the final report, he also identifies specifics

¹² Ministry of Defence, "Defence Reform – Second Annual Review," 2.

¹³ Ministry of Defence, "Defence Reform – Third Annual Report," 5 December 2014, 1.

¹⁴ *Ibid.*, 2.

that SDSR 15 should fulfill. While the budget is the primary constraint, it indirectly influences the Service Chiefs flexibility because of the fixed Strategic Programs, and this is particularly true for the RN. Levene envisaged SDSR 15 as a serious test of the Head Office's ability to formulate strategy. Further, he saw the Service Chiefs' flexibility to determine the size and shape of their Services, in order to deliver the required outputs of that strategy, as a crucial challenge.¹⁵

Summary: Levene shoots himself in the foot

Levene did not go far enough during his reforms and inadvertently subverted his own intent through the recommendations he made. Acknowledging the magnitude of the task set before Lord Levene as gargantuan, and that it required considerable framing by distinct boundaries to allow a realistic chance of success, he discounted overarching budget and political constraints apparent at the beginning of the reform process that eventually undermined his intent. Contextual analysis of the implications of the Strategic Programs, as well as an assessment of the economic and political factors, provide tools to make recommendations on specific reforms that would have alleviated the challenges faced by SDSR 15 and beyond.

¹⁵ Ibid., 7.

CHAPTER 3: IMPLICATIONS OF STRATEGIC PROGRAMS

UK Defence Reform initiatives intended to tackle an unaffordable program whilst maintaining the country's needed military capability. Current political and military direction, set out in SDSR 10 and 15, identifies the nuclear deterrent and Carrier Enabled Power Projection (CEPP) capability as fulfilling the country's needs, but is also a continuous subject of intense national debate.¹ The literature available to feed that intense national debate is plentiful; however, the literature regarding the implications of this direction received ominously less attention.

The Levene Report effectuates its charge to solve the fiscal problem by concentrating on changing organizational structures and behaviors of the MoD to prevent future recurrence of over-heated programs. However, it deliberately refrained from addressing today's obvious fiscal implications and challenges of the strategic programs. The strategic direction to maintain a nuclear deterrent and build a CEPP capability effectively locks in almost half of the available equipment budget as it stands today.² The likely cost growth of these major programs and the decrease in real terms of available budget will challenge the greater freedom desired for the Service Chiefs by Defence Reform.

The Successor Program - the UK nuclear deterrent program - replaces the Vanguard-class of submarines, but not the Trident D5 ballistic missiles, as the sole

¹ United Kingdom. *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*, 5.

² Malcolm Chalmers, "Mind the Gap: The MoD's Emerging Budgetary Challenge," *RUSI* Briefing Paper (March 2015): 16.

delivery vehicle for the UK's nuclear weapons.³ Trident is commonly and confusingly used to describe the complete nuclear deterrent capability of submarine and ballistic missile, rather than the ballistic missile itself. The program to replace the US built and maintained Trident missile is yet to be identified by either the US or UK.⁴ The uncertainty of fiscal cost for the two elements carries both a scale and level of confidence. The initial gate cost estimates for the Successor Program vary in scale by £3bn at a 90% level of confidence, whereas the *Trident Alternatives Review* identifies a smaller £2bn variation in scale, but with a higher chance of variation due to the 50% confidence level of those figures. The 2014 MoD Equipment Plan reports the cost of the submarine sector, which includes both elements of the nuclear deterrent, at the lower end of the cost estimate at £40bn, equating to 25.5% of the overall 10-year budget. The Equipment Plan has £8bn of 'unallocated headroom' built in across all the sectors, but the submarine sector, with at least £5bn of variation already identified from the combination of the Successor Program and Trident replacement, will be the biggest procurement program of the decade and carry the largest proportion of risk.⁵

CEPP also applies pressure to the RN's budget due to the remaining expenditure on the two Queen Elizabeth-class carriers and the planned Type-26 frigate which will be a critical support element of the Carrier Support Group (CSG). The Equipment Plan allocated £18.2bn to the ships sector, which accounts for 11.6% of the overall 10-year

³ United Kingdom, "The Future of the United Kingdom's Nuclear Deterrent," HM Government. December 2006.

⁴ Tom Waldwyn, "Renewing Trident," International Institute for Strategic Studies, <https://www.iiss.org/en/militarybalanceblog/blogsections/2015-090c/may-b1c8/european-defence-bcf2> (accessed November 20, 2015).

⁵ UK Government, "Major Projects Report 2014 and the Equipment Plan 2014 to 2024", National Audit Office, 40-41, 75. <https://www.nao.org.uk/wp-content/uploads/2015/01/Major-projects-report-2014-and-the-equipment-plan-2014-to-20151.pdf> (accessed November 22, 2015).

budget. The responsibility for the two largest sectors in the Equipment Plan sit under the Chief of the Naval Staff (CNS). The impact of the largest proportion of realized risk would severely restrict the flexibility of the Chief of the Naval Staff's budget, and explains Levene's observation, in his final annual report, that CNS felt the least empowered of all the Chiefs to run their own service.⁶

The cost of the JSF aircraft and the associated weapons consumes a considerable proportion of the Chief of the Air Staff's budget. SDSR 15 committed to a total of 138 JSF beyond the initial commitment of 48 aircraft, with final numbers being confirmed at main gate in 2017. Ominously, before SDSR 15 the government deemed the original aspiration for 150 aircraft unaffordable.⁷ So far, the forecast cost of the program is £5bn and the MoD is reticent to disclose the budget for the further buy due to the impacts on commercial negotiations. In 2003, the UK Government estimated the procurement cost of the JSF program to approach £10bn, dependent on the number of aircraft acquired and support costs.⁸ The Equipment Plan allocates £17.9bn to the combat air sector, which includes both the Typhoon and JSF. Overall this accounts for 11.4% of the overall budget, but the portion set aside for JSF remains unclear. A portion of the £12.6bn allocated for the weapons sector will also contribute directly to arming the JSF. Despite the difficulty of precise quantification, the number of JSF will directly impact the flexibility of the Chief of the Air Staff's budget.⁹

⁶ Ibid., 40-41, 65, 76.

⁷ Louisa Brooke-Holland, "The UK's F-35 Lightning II Joint Strike Fighter", House of Commons Library, 6 February 2015. <http://researchbriefings.files.parliament.uk/documents/SN06278/SN06278.pdf> (accessed November 22, 2015).

⁸ HC Deb 20 June 2003 c517W, as cited in Louisa Brooke-Holland, "The UK's F-35 Lightning II Joint Strike Fighter", House of Commons Library, 6 February 2015. <http://researchbriefings.files.parliament.uk/documents/SN06278/SN06278.pdf> (accessed November 22, 2015).

⁹ UK Government, "Major Projects Report 2014 and the Equipment Plan 2014 to 2024", 40-41, 62, 67.

The Army enjoyed a long period of land equipment purchased through the Urgent Operational Requirements line, which obtains funding directly from the Treasury rather than Chief of the General Staff's (CGS) budget. The Equipment Plan for the land equipment sector allocates £15.4bn and consumes 9.8% of the overall equipment budget. The Army faces a slightly different challenge as the major projects place comparatively modest pressure on the CGS. Plans for modernization of the Warrior Fighting Vehicle at £1.3bn, the introduction of the Scout Specialist Vehicle at £1.4bn, and the future replacement of the Apache helicopter at £0.6bn do not carry the magnitude of the other services, but the diverse and extensive number of programs presents a management challenge of complex coordination and control.

Historically, the MoD's major procurement projects demonstrate the largest variations in approved budget. The 2014 National Audit Office (NAO) report into major projects showed a 72% variation of £2.56bn on the approved £3.54bn for the demonstration and manufacture (D&M) phase of the Queen Elizabeth carrier and a 16% variation of £2.37bn on the approved £15.17bn for the D&M phase of the Typhoon fighter. The increased likelihood of large variations has clearly been heeded by the MoD due to £13.8bn of reserve to tackle unforeseen circumstances, found from the combination of £8bn of unallocated headroom in the Equipment Plan as well as a contingency pool of £4.6bn and a centrally held provision of £1.2bn. The impact of poor management of major projects remains severe, with £13.8bn equaling the amount the MoD allocates for the whole of its air support (air transport and tankers), more than the helicopters or weapons sectors, and it dwarfs the sum of the £11.2bn for the three smallest sectors: ISTAR, Naval Bases and Joint Supply Chain. The NAO report also

highlights that significant variations arise due to conditions beyond the control of the military; in one example, the JSF program reported saving £0.26bn in one year due to a change in the exchange rate.¹⁰

The Logic of Failure

Dietrich Dorner in *The Logic of Failure* warns that despite best intentions, a lack of understanding the cause of complex problems is the most common cause of failure. Dorner emphasizes the importance of understanding the environment and continuing to make numerous decisions as problems occur when operating in a complex situation. He found that when under time pressure, bad performances were due to an absence of sufficient information coupled with a tendency to leap into action following a single decision.¹¹ The decision to remove the Nimrod Maritime Patrol Aircraft in SDSR 10 and then consider how to replace it in SDSR 15 suggests the MoD made a hasty decision. The MoD also quickly reversed the SDSR 10 decision to change JSF to the carrier variant once the costs implications to the carrier came to light, again suggesting a hasty decision without adequate information. The MoD decisions on MPA and JSF variant signpost that a lack of appropriate understanding poses an enduring and significant problem for Defence Reform, but Levene did not make recommendations to deepen understanding of strategic programs.

¹⁰ UK Government, “Major Projects Report 2014 and the Equipment Plan 2014 to 2024”, National Audit Office. <https://www.nao.org.uk/wp-content/uploads/2015/01/Major-projects-report-2014-and-the-equipment-plan-2014-to-20151.pdf> (accessed 22 Nov 2015).

¹¹ Dietrich Dorner, *The Logic of Failure*, (New York: Metropolitan Books, 1996), 103.

Summary: The Risky Business of Getting the Small Things Right

The scale of financial risk in the major projects should have merited deeper recognition when considering the model for implementing Defence Reform, particularly due to the impact on the intended flexibility for the Service Chiefs. Levene placed a great deal of emphasis on the Service Chiefs focusing internally and encouraged them to spend less time in the Head Office in order to concentrate on running their own Services. However, his recommendations made the task of achieving overall coherence in MoD major programs more difficult. The movement of personnel from the Head Office to the Front Line Commands (FLCs) placed the burden to understand and set strategic direction for almost half of the equipment budget on a significantly smaller Head Office. Moreover, the movement of capability planning staff to physically separated FLCs then increased the burden of reporting both upwards to Head Office and laterally to the other Commands. Levene's intent of well managed single Service projects that combine to deliver affordable joint capability diverted resources from a deeper understanding of the major projects as a whole.

Additionally, the reliance on SDSR, that justified the internal focus of the Levene report, demonstrated a lack of appreciation of external factors that create risk in decision making within the MoD. The MoD's major projects are complex, involving a multitude of different governmental departments, a multiplicity of industries, and a host of nations, all of which occur within a constantly evolving global threat environment. SDSR 10 demonstrated the difficulty in predicting the future environment when it did not predict the widespread instability seen during the Arab Spring, the growth of Islamic terrorism in the Middle East and Africa, and the resurgence of Russian aggression against countries

on NATO's borders.¹² The next section explores British economic and political complexities in more detail, but one must recognize that these external factors create the biggest risks in MoD decision making, particularly for the strategic programs.

Strategic programs that constitute almost half of the equipment budget and that hold the biggest risks for delays and increased costs carry the potential to place a considerable squeeze on the budgets available to the Service Chiefs. The new operating model puts the onus on the Chiefs to ensure the internal risks are well managed, whilst also increasing the burden of both reporting to the Head Office, and ensuring communications between the FLCs are clear, transparent, and timely. The combination of encouraging Service Chiefs to spend less time in Head Office, decreasing capability planning staff from Head Office, and increasing the reporting burden on single Services has removed intellectual horse-power from delivering coherent Strategic Programs. Levene has unintentionally increased the considerable financial risk from incoherent decisions, apparent before the implementation of Defence Reform, that will degrade the flexibility desired for the Service Chiefs. Furthermore, Levene's focus on internal factors for the management of the MoD does not pay enough attention to the external economic and political factors that also heavily influence the Service Chiefs, because the external factors contribute the largest risk and are the least predictable.

¹² UK Government, "Preparing for SDSR 15 – Continuity and Change," Permanent Under Secretary and Chief of the Defence Staff, 14 October 2014.

CHAPTER 4: ECONOMIC CONTEXT

Economic constraints served as the principal driver for Defence Reform, and led to specific acknowledgement in the NSS that an “economic deficit is also a security deficit.”¹ Acknowledging that the economy drives the budget for Defence is straightforward, but the subtler ability of MoD to react quickly and coherently to budget changes remains a vitally important strategic factor that Defence Reform has not addressed sufficiently. Having explored conceptually the trend of increasing constraints on the Service Chiefs’ flexibility given the impact of strategic programs, this chapter demonstrates the impact of budgetary change. The delivery of the annual budget by the Chancellor of the Exchequer allocates the budget to MoD Head Office, which then allocates the budget for each Service Chief and retains central funding for strategic programs through the internal process of the Annual Business Cycle (ABC). Layered on top of the ABC, the five yearly SDSR process provides the vehicle to make major changes to the strategic direction of the MoD. The ABC plans over a ten-year period and makes assumptions about the economic context that drives the level of growth of the Defence budget. A key aspect of implementing successful Defence Reform is recognizing the speed with which the control valves open and close and the subsequent impact on decision-making, particularly in reaction to the annual budget and five yearly strategic direction.

¹ HM Government. *A Strong Britain in an Age of Uncertainty: The National Security Strategy*, 4.

Equipment and Personnel

Changes in the annual budget or SDSR most heavily impact personnel levels and equipment programs, the two core expenses of the MoD budget. The economic downturn during the early part of the century led to significant cuts in personnel and equipment, as articulated in SDSR 10. The RAF and Royal Navy are said to man the equipment, while the Army equips the man, which indicates where the brunt of cuts are felt in each Service. SDSR 10 reduced personnel levels by 29,000 military posts and 25,000 civilian posts, with the vast majority of the cuts, some 19,000 posts, inflicted on the Army.² The retiring of major equipment platforms like the aircraft carrier HMS Ark Royal, the Joint Harrier Force, and the Nimrod Maritime Patrol Aircraft were keenly felt by the Royal Navy and RAF.³ The Army also felt the pinch of the loss of primary platforms with the reduction in their flagship Challenger 2 Main Battle Tanks by 40% being the most substantial equipment cut.⁴ The majority of cuts to equipment occurred within a year, but new complex equipment programs take decades to deliver. The rate of personnel cuts in pure numbers changed over several years, with recovery likely on a similar timescale, but at the expense of a much lengthier rebuilding of experience and knowledge. For a high tech military, fluctuating personnel numbers erode specialist capability and the cutting and reinstating of equipment programs has severe time and cost implications.

² 7,000 Army, 5,000 Navy and 5,000 RAF jobs were cut in SDSR 2010, with a further cut of 12,000 Army during the three-month exercise that followed SDSR 10. HM Government. *A Strong Britain in an Age of Uncertainty: The National Security Strategy*, 32.

³ Joint Harrier Force was a combined capability from both the Royal Navy and RAF.

⁴ HM Government. *A Strong Britain in an Age of Uncertainty: The National Security Strategy*, 22-27.

Consequences of Urgent Operational Requirements (UOR)

Speed also became a critical factor for plugging capability gaps, but the thirst for rapid tactical success came at the expense of coherent strategy. The fatalities suffered in Iraq and Afghanistan due to enemy tactics developed in a matter of months drove the much faster UOR acquisition process. The UOR process aimed to deliver equipment within a year of identifying the requirement and funding came directly from the Treasury rather than the MoD's budget. The Army initially relied on the soft skinned Land Rover for patrolling and suffered devastating casualties, primarily due to Improvised Explosive Devices (IED). The UOR process proved a tactical success, particularly in the case of protected mobility for the Army. The UOR process introduced a new family of protected vehicles in the form of the Mastiff, Ridgeback, and Wolfhound, which are all variants of the American-produced Cougar. The initial tactical success of the vehicles resulted in a dramatic increase from 108 to over 2000 vehicles, spanning ten different types, and at a cost increase from £35m to approaching £1Bn.⁵ The focus of the UOR process on speed of delivery to the front-line produced a large collection of vehicles, from a number of different companies, maintained by a complicated and inefficient support package. The complications also strained the training, infrastructure, doctrine, information and logistics support required. The capabilities of each vehicle overlapped considerably, and provided an incoherence that, although individually tactically successful, highlighted a collective strategic failure of the UOR process. However, the useful organizational knowledge

⁵ A full breakdown of the ten protected patrol vehicles see Ministry of Defence, "Armoured Fighting Vehicles," British Army, <http://www.army.mod.uk/equipment/23206.aspx> (accessed December 8, 2015). The history of the UORs see Daly History Blog, "Afghanistan, Vehicles, and Urgent Operational Requirements," Daly, <https://dalyhistory.wordpress.com/2014/02/20/afghanistan-vehicles-and-urgent-operational-requirements/> (accessed December 8, 2015)

gained from reducing a lengthy acquisition process by identifying redundant or inefficient processes signposts the possibility of delivering strategic requirements more expeditiously.

The strategic failure of the UOR process extended to aircraft across all three Services that had self-defense equipment upgraded as the MoD identified theatre specific vulnerabilities. Tactically this led to the UK having some of the best protected aircraft against the theatre specific infrared technology threats, but compromised the ability to deal with more advanced global multi-spectrum threats, such as the nearby Syrian Integrated Air Defense System.⁶ Procurement of the Sentinel and Shadow ISTAR aircraft by the RAF provided another example of filling theatre specific roles with the intent to retire them once operations in Afghanistan were complete. The tactical success in Iraq and Afghanistan led to retaining aircraft after considerable effort to ensure the platforms remained supportable. The most concerning effect of the tactical success of the UOR process was the perception that acquisition could be done quickly and efficiently when needed; however, in reality, at the strategic level, the process produced expensive theatre specific equipment that, in fact, diverged from the intent to field a globally agile and capable force. Furthermore, the strategic impact of funding directly from the Treasury, at best, confused MoD prudent budget planning and, at worst, contributed to an unsustainable view that additional Treasury funding would address capability gaps.

⁶ The declining ability came from a lack of invest in both equipment and expertise to defeat advanced technology threats.

SDSR Bust then Boom

The punishing cuts in SDSR 10 partially addressed the politically characterized “£38Bn black hole” between Defence aspirations and fiscal reality.⁷ Then, experts debated what further cuts would be required. Professor Malcolm Chalmers, Deputy Director-General of the Royal United Services Institute (RUSI) and a member of the consultative panel for both the 2010 and 2015 SDSR, presented both pessimistic and optimistic economic scenarios for future Defence budgets. He argued, before the results of the election and SDSR 15 were known, that in either economic scenario the MoD faced a dichotomy of significant personnel and equipment cuts, only the severity differed.⁸

The optimistic scenario projected Defence capable of affording the same level of protection as health and education at an additional cost to the treasury of £4Bn per annum by 2019/20. Chalmers viewed this increase as unlikely because the funds would have to be found from taxation or borrowing. The pessimistic scenario forecasted Defence would take a 10 per cent real-terms cut over the first four years, then return to one per cent real-terms growth in equipment and a static real-terms non-equipment budget. The pessimistic scenario would require equivalent cuts to SDSR 10, reducing overall military personnel levels from 145,000 to 115,000 and loss of major equipment programs by the end of the decade. Chalmers also stressed that even in the optimistic scenario the UK

⁷ HM Government, “Defence Secretary Balances MoD Budget,” <https://www.gov.uk/government/news/defence-secretary-balances-mod-budget> (accessed December 8, 15).

⁸ Chalmers, “Mind the Gap: The MoD’s Emerging Budgetary Challenge,” 1.

would diverge from the NATO target of spending 2 per cent GDP on Defence, projecting 1.95 per cent in 2015/16 and falling to 1.75 per cent by 2019/20.⁹

The Chancellor of the Exchequer's Budget announced on 8 July 2015 exceeded the expectations of even the optimistic scenario. The Defence budget would be increased in real-terms by 0.5 per cent annually until 2020/21 and declared a commitment to the NATO 2 per cent target for the remainder of the decade.¹⁰ Although Chalmers predicted it unlikely, the announcement protected the MoD budget in line with health and education. The timing of this protection effectively negated the need for the MoD to justify a budget to the Treasury during the pan-governmental department Spending Review in November. Furthermore, the announcement empowered the Service Chiefs by defining a budget for SDSR 15 that safeguarded any savings and permitted internal reinvestment.

Accounting Changes: The Politics of Economics

The UK's commitment of billions of pounds to the NATO two percent target caused the most surprise, but the promise was not as dramatic as it first seemed. The promise was made possible in 2015/16 not by an injection of funding, but by a change to how the budgeters calculated totals. The calculation, using the same NATO counting rules as previous years, totaled £36.8Bn for 2015/16, but using new rules the figure was boosted to £39Bn, a difference of £2.2Bn. This was achieved by adding several items that have not previously been included by the UK: provision for war pensions (£820 million); contributions to UN peacekeeping missions (£400 million); pensions for retired

⁹ Ibid., 17-18.

¹⁰ HM Treasury, Summer Budget 2015, HC 264 (London: The Stationery Office, July 2015), 27.

civilian MoD personnel (£200 million); and a large part of the MoD's income (£1.4 billion).¹¹

Despite this, the change to counting methodology would not maintain the two percent level until the end of the decade. While the MoD budget is set to grow by one half percent per annum, GDP is projected to grow by an average of 2.4 percent per annum.¹² The difference equates to £3.5Bn in 2020/21, but the Budget indicated that part of this shortfall would come from the £2.2Bn expenditure on the secret intelligence agencies.¹³ In addition, the Budget also announced that the MoD would be able to bid for further resources from a new Joint Security Fund, which would total an additional £1.5Bn a year by the end of the Parliament.¹⁴ The combined total of the intelligence spending and Joint Security Fund met the NATO spending commitment, but the reality of any increase in Service Chief's budget would lie solely in the success of competitive bids for funding from the Joint Security Fund.

The analysis of the announcements indicated that the MoD faced an economic context that would stabilize the size and capability of the military. Chalmers assessed the one half percent increase in real-terms of Defence budget capable of maintaining both the MoD planning assumption of a one percent real-terms increase in equipment budget and the numbers of Service personnel.¹⁵ Savings made from capping both military and civilian public-sector pay and reducing civilian MoD posts by the same 30 per cent

¹¹ Malcolm Chalmers, "Osborne's Summer Surprise for Defence: Guaranteed Real-Terms Spending Increases," *RUSI Briefing Paper* (July 2015), 4-5.

¹² Office for Budget Responsibility, *Economic and Fiscal Outlook*, Table 4.1.

¹³ Chalmers, "Osborne's Summer Surprise for Defence: Guaranteed Real-Terms Spending Increases," 2, 5-6.

¹⁴ HM Treasury, *Summer Budget 2015*, 27.

¹⁵ Chalmers, "Osborne's Summer Surprise for Defence: Guaranteed Real-Terms Spending Increases," 3.

suffered in SDSR 10 enabled the military to escape from the threat of cuts to personnel and equipment programs. Despite maintaining military personnel levels, the capping of pay at one percent, considerably below the private sector 3.9 per cent for the same period, would likely generate retention problems, particularly for specialist skills.¹⁶ SDSR 15 also targeted the military benefits scheme as an area for saving, further eroding permanent retention incentives and increasing the likelihood of less effective, but more expensive short-term solutions. The loss of civilian MoD posts primarily impacted the equipment delivery area and MoD Head Office, which created a draw for military personnel to fill the gap. The positive news of the one half percent increase was warmly welcomed by those fearing cuts on the scale of SDSR 10, but still applied pressure to maintain highly skilled and motivated personnel. Reducing staff levels both at the delivery and strategic headquarters also added risk to delivering an affordable and coherent equipment program.

Chalmers summarized the outcome of SDSR 15 as “Steady as She Goes,” but analysis of the equipment articulated within it reveals a commitment that goes well beyond a steady one percent equipment budget growth planning assumption.¹⁷ Chalmers stated that “numbers of front-line aircraft and ships should stabilise at or around current levels,” however, this contradicts the reduction from thirteen to eight Type 26 destroyers and the significant increases in aircraft.¹⁸ Chalmers rightly believes that the continuation of delivering the previously planned 48 JSF fighter aircraft changes little, but SDSR 15

¹⁶ Office for Budget Responsibility, *Economic and Fiscal Outlook*, 82.

¹⁷ Malcolm Chalmers, “Steady as She Goes: The Outcome of the 2015 SDSR,” RUSI, <https://rusi.org/commentary/steady-she-goes-outcome-2015-sdsr> (accessed 27 December 2015)

¹⁸ Ibid.

committed to 138 JSF which had previously been assessed as unaffordable.¹⁹ Chalmers' contention is understandable as SDSR 15 is inconsistent, it describes the formation of two JSF Squadrons, planned with 48 aircraft in SDSR 10, whilst at the same time declaring a commitment to purchase 138 aircraft through the life of the program. It is, however, surprising Chalmers either missed or ignored this inconsistency, particularly as the government previously vehemently refused to be drawn on numbers and the near tripling of numbers would add £15Bn in platform cost alone. The commitment of 9 P-8 Orion Maritime Patrol Aircraft, costing over £2Bn, contradicted the reported scrapping, due to being "fiendishly expensive," prior to SDSR 15.²⁰ The addition of two Squadrons of Typhoon aircraft, fitted with the new and notoriously expensive Active Electronically Scanned Array radar, sat at the very upper end of expectations before SDSR 15.²¹ Chalmers assessment of "Steady as She Goes" appears unusually misinformed.

The only new announcement matched with new levels of funding was the increased investment in special forces, drones, cyber, and counter-terrorism, with the estimated ten-year cost of £11Bn attributed to the annual £1.5Bn Joint Security Fund.²² Although equipment funding was allocated for JSF, Typhoon, and MPA, the commitment in SDSR 15 tended to the most expensive end of the scale and appeared unlikely to be

¹⁹ Ibid., 138 JSF committed to in HM Government, "National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom," 32, and assessed as unaffordable by Louisa Brooke-Holland, "The UK's F-35 Lightning II Joint Strike Fighter", 13. <http://researchbriefings.files.parliament.uk/documents/SN06278/SN06278.pdf> (accessed November 22, 2015).

²⁰ Mark Hookham, "MoD sinks £2bn sub-hunter jet deal," The Sunday Times http://www.thesundaytimes.co.uk/sto/news/uk_news/article1627241.ece?CMP=OTH-gnws-standard-2015_10_31

²¹ Knowledge gained working in capability area responsible for Typhoon, also see Elizabeth Quintana, "UK Funding for 'Captor-E' AESA Radar Announced: Better Late than Never," RUSI, <https://rusi.org/commentary/uk-funding-%E2%80%99captor-e%E2%80%99-aesa-radar-announced-%E2%80%93-better-late-never-0> (accessed December 27, 2015).

²² Chalmers, "Steady as She Goes: The Outcome of the 2015 SDSR."

offset by the reduction of five destroyers. SDSR also defines specific numbers of platforms, but the cost of the program goes well beyond pure platform numbers. The immaturity of detailed plans to support the increased requirement across all the Defence Lines of Development (DLOD)²³ also presents a significant risk to the affordability and timely delivery of each of the commitments.

Summary: Platforms Do Not Equal Capability

Recent experience showed that focus on delivering platform numbers leads to problems for enabling functions, as demonstrated by the delivery of military flying training. The Military Flying Training System (MFTS) Program suffered a reduction in budget from £6.8Bn to £3.2Bn after SDSR 10 reduced the front-line pilot requirement, which delayed the program by almost 6 years.²⁴ SDSR 15 increased the front-line pilot requirement posing another significant delivery challenge, albeit in the opposite sense, for the MFTS Program. The ripple effect of what may seem an innocuous change in platform numbers changes enabling programs by the order of billions of pounds and creates delays exceeding the five year SDSR cycle.

The change in Defence budgets from 2010 to 2015 surprised experts and presented a significant challenge to the MoD of matching capability to budget. SDSR 10 saw substantial cuts to personnel and equipment, but was widely assessed as having not gone far enough. SDSR 15 stabilized military personnel levels, but the frozen pay cap for both military and civilian personnel introduced a retention problem. Both SDSRs cut civilian MoD posts by 30 per cent, applying more risk to both the delivery arm, Defence

²³ UK DLODs are equivalent to the US DOTMLPF and break down into Training, Equipment, Personnel, Information, Doctrine, Organisation, Infrastructure and Logistics (TEPIDOIL).

²⁴ National Audit Office, "Military flying training," HC 81 Session 2015-16 (12 June 2015).

Equipment and Support (DE&S), and strategic headquarters of Defence. On the equipment side, SDSR 10 made drastic and at times incoherent plans that led to retiring and later reinstating platforms. SDSR 15 maintained a steady course with strategic programs like nuclear deterrent and aircraft carriers, but substantially expanded the number of aircraft and counter-terrorism capability. The Joint Security Fund backed the counter-terrorism announcement, but the increase in aircraft numbers placed precarious reliance on affordability from existing budget plans and savings made from the reduction of planned Type 26 destroyers. Even if true, this limited the flexibility of Service Chiefs for the same reasons as the strategic programs.

Service Chiefs held to account for the delivery of SDSR 15 face challenges that necessitate further Defence Reform. The key for recruiting and keeping high caliber personnel requires competitive conditions compared to the outside market, which requires a top-down strategy for investing in its people backed by appropriate levels of funding. Although this strategy exists, it appears the priority reduced to such an extent as to endanger the most fundamental element of capability. Defence Reform provides a more effective mechanism to allow Service Chiefs to protect their people from political public-sector wide decisions and gives back crucial control of capability.

The subtly different key for equipment procurement is striking the right balance between speed and coherence. The UOR process demonstrated a fast but incoherent approach, which sat at the opposite end of the scale to the coherent but slow delivery of complex strategic programs. The end of operations in Afghanistan amended the UOR process funding from the Treasury to the MoD core budget. But, the new source of funding, signified by renaming the process to Urgent Capability Requirement (UCR),

broadly followed the same UOR procedures. The issue of incoherent UORs came from requirements that reacted to tactical demands, but requirements set from a long-term strategy and implemented using the knowledge of faster processes would achieve an ideal middle ground. Unlikely to be successful at the first attempt, an annual review of the processes from Head Office through FLCs to DE&S, aimed at reducing systemic delays to the delivery of programs, would vastly improve Defence's ability to react to budgetary changes.

CHAPTER 5: POLITICS AND UK APPROACH TO STRATEGY

The predicted economic recovery alone did not change the fortunes for the MoD in SDSR 15, politics also played a definitive role. The balance between the demands of the domestic environment and level of threat perceived in the external environment heavily influenced the political priorities given to the MoD. The behavior of Russia in the Ukraine, recent terrorism in Europe, and the complex conflict in the Middle East all offset the primary domestic demands of health and education. The recent loss of thirty British lives in Tunisia on 26 June 2015 and the close proximity of the Paris attacks on 13 November 2015 brought into sharp focus the clear and present danger to the UK presented by the external environment.

The change of political parties and the level of priority given to Defence, although recently beneficial, presents a specific challenge to the MoD. The success of the Conservative Party established a majority government at the last general election in May 2015 and heavily influenced the outcome of SDSR 15. The Conservative manifesto committed to increase the equipment budget by one per cent per annum in real terms—the original assumption for MoD plans. It also added the further significant commitment to maintain the number of regular trained personnel. None of the other major parties made similar policy commitments.¹ While the turbulent external environment often receives considerable focus during defence policy formulation, one must not dismiss the

¹ Chalmers, “Steady as She Goes: The Outcome of the 2015 SDSR.”

pivotal role of domestic policies, particularly bureaucratic policies, which usually receive much less attention.

Modern democratic societies create complex domestic environments and complicate policy-making relationships between politicians and military commanders. Clausewitz elegantly emphasized the importance of the relationship and agreement between politicians and commanders stating, “the first, the supreme, the most far-reaching act of judgement that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking.”² Strategy evolved over time from being *the art of the general* to a more complex definition of institutional interaction. Whilst the essence of that judgement remains unchanged, the interchange between statesman and commander is now less driven by simple interaction between individual personalities and more reliant on bureaucratic committees informed by policy and strategy documentation. This chapter demonstrates the tensions caused by the bureaucratic process, the negative implications, and identifies areas that require reform.

Politicians, commanders, and academics alike recognize the importance of clear policy and strategy, and the MoD recently argued clear policy and strategy are even more important for the UK in the current global environment. A notable UK MoD paper highlighted that “... the increasing multipolarity of global influence makes it more, rather than less, important that the UK is clear about its own interests and objectives in order to maximize its influence and that we therefore require ... a strategic handrail.”³ The National Security Strategy (NSS) constitutes the UK’s highest level attempt to be that

² Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (Germany: Princeton University Press, 1993), 100.

³ United Kingdom. Ministry of Defence, *Organising Defence’s Contribution to National Strategy*, A Paper for the Defence Strategy Group, 16 Jan 2012, (London: Ministry of Defence, 2012), 4.

handrail and define a strategy, but critics point out the lack of detail and the unrealistic assumption that a reduction in resources will not result in a loss of influence.⁴

Strategy Theory

Effective strategy balances ends, ways, and means. Art Lykke provides a useful model of a three-legged stool to visualize the potential lack of balance between the three legs, which creates a tipping effect that represents the risk of success for a political policy on national security.⁵ The NSS drones on about the extensive UK global aims (ends) for a more secure future environment, but fails to balance them with ways or means and consequently represents an off-balance stool, which represents a major risk to national security. The NSS more closely represents a vision than well balanced strategy. As the common saying goes “a vision without funding is a hallucination,” which neatly suggests how an under-resourced strategy represents a danger to national security.

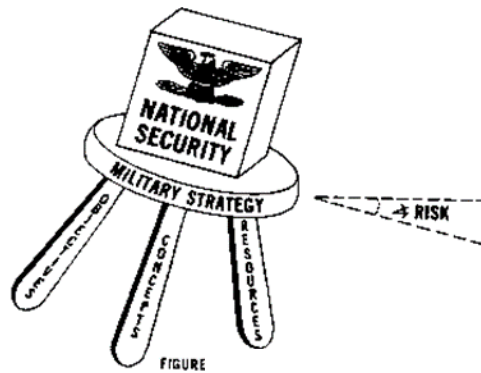


Figure 1. Lykke Model of Strategy

Harry Yarger provides another comprehensive model to conceptualize the different levels of strategy required in a modern environment, inclusive of grand strategy

⁴ Hew Strachan, “British National Strategy: Who Does It?” *Parameters* 43, No.2 (2013): 44.

⁵ As cited in Harry Yarger, “Towards A Theory of Strategy: Art Lykke and the Army War College Strategy Model,” <http://www.au.af.mil/au/awc/awcgate/army-usawc/stratpap.htm> (accessed December 28, 2015).

down through to theater strategy. Yarger's model also helps to explain the paradox of a hierarchical yet symbiotic relationship between policy and strategy, as well as the influence of external and domestic environments within it. According to Yarger, the first order of business in achieving a comprehensive strategy is understanding what your highest level end states are, i.e., what does it mean to be the UK and where, as a nation, does the UK want to go?⁶ Frequent Defence commentators, such as Porter, Chalmers, and Hayward all recognize that the question of Britain's identity is unsettled, and a wealth of literature supports the debate that discusses the UK's relationship with the U.S., NATO, and the EU.⁷

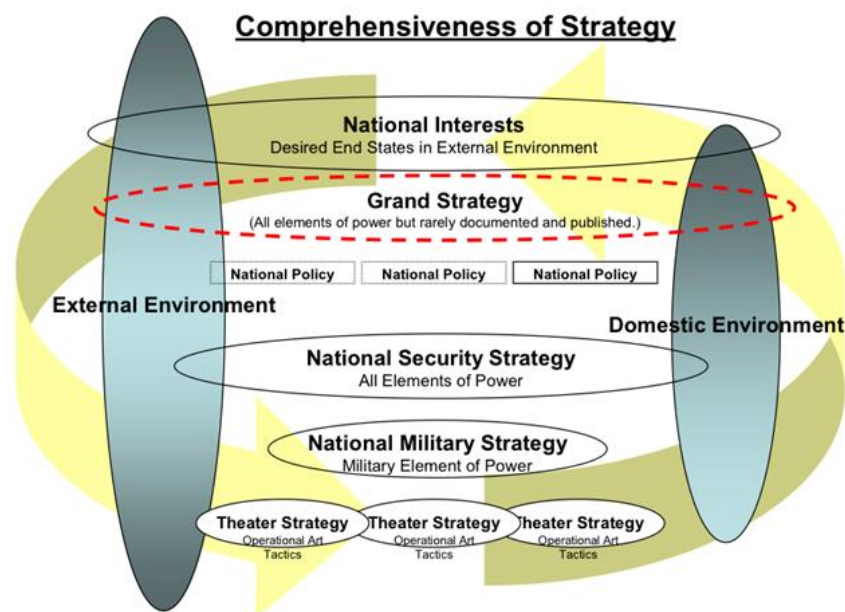


Figure 2. Yarger Model of Comprehensive Strategy

⁶ Harry Yarger, "Assessing the Strategic in Surprise," Pentagon, <https://www.redanalysis.org/tag/pentagon/> (accessed December 28, 2015)

⁷ Patrick Porter, "Why Britain Doesn't Do Grand Strategy," *RUSI* Vol. 155, No.4 (August 2010): 10. Malcolm Chalmers, "Mind the Gap: The MoD's Emerging Budgetary Challenge," *RUSI* Briefing Paper (March 2015): 8. Keith Hayward, "Smart procurement: The European dimension", *RUSI* Vol. 143, No. 2 (March 2008): 47-50.

The debate boils down to a decision about where the UK wants to sit on the spectrum between being the special partner of the U.S., taking a pivotal role in the EU, and being a lead power in NATO. Although there is a great deal of overlap, *the problem is that the UK cannot afford to be all of these things at once*. Therefore, it requires the UK unambiguously identify the elements of those relationships that satisfy the country's national interests in order to make appropriate Defence structure decisions.

U.S. Influence

The special relationship and level of alignment between the U.S. and UK is natural due to shared interests and values, but thwarts, to some extent, independent decision making. For example, both the UK and U.S. NSS highlight common themes in their respective national interests as security, prosperity, promoting values, and protecting international order. The UK first issued the NSS in 2010 and, in fact, mirrored the U.S. organizational model by creating a National Security Council (NSC).⁸ Porter supports this view by contending that the UK is actually part of an American Grand Design that constrains independent decisions when it comes to security.⁹ The UK's first forecast that MoD spending would drop below the NATO two percent target instigated a strong reaction from the U.S. suggesting Porter's accuracy. In fact, President Obama personally appealed to Prime Minister Cameron that a failure to hit the spending target would undermine the military alliance and harm mutual national interests.¹⁰ Lieutenant General Ben Hodges, commanding the U.S. Army in Europe, publicly added his concern by

⁸ Ironically, the driver for the NCS was because of the perceived failure of Prime Minister Tony Blair in robustly and independently making the decision to join the U.S. in the invasion of Iraq.

⁹ Porter, "Why Britain Doesn't Do Grand Strategy," 9.

¹⁰ Ben Farmer, "Obama to Cameron: Maintain UK Defence Spending or Weaken NATO," The Daily Telegraph, <http://www.telegraph.co.uk/news/worldnews/barackobama/11403519/Obama-to-Cameron-maintain-UK-defence-spending-or-weaken-Nato.html> (accessed December 29, 2015).

asserting that the MoD did not have enough resources to provide a sufficient land force for coalition operations.¹¹ This political pressure may go some way to explain the surprise of the two percent NATO commitment in SDSR 15.

SDSR 15 demonstrates strong political messaging to the U.S. in the UK's pursuit of an unstated Grand Strategy that prioritizes the strategic partnership. Yarger's model explains that Grand Strategy is rarely explicitly documented or published, but the indicators from SDSR 15 support the prioritization of the U.S. The relatively small increase of £1.5Bn per annum in real terms Defence spending combined with the changes in accounting rules that equated to the majority of the two percent shortfall, led to a politically powerful announcement that lacked an equivalent impact to Defence output. The accountancy rules address the political disquiet, but, in real terms, the concerns of President Obama and Lieutenant General Hodges have not been addressed. The use of a change in accountancy rules has not been covert, but the use of intelligence funding cannot be criticized by the U.S. as it also uses the same rules and served as the inspiration for the UK adoption of the technique. Unfortunately, this does not alleviate the economic constraint on both the UK and U.S. that requires hard decisions in the future. SDSR 15 makes clear that U.S. political pressure drives some UK strategic announcements, and, consequently, increases strains on MoD's flexibility to deliver a balanced Defence capability.

Moreover, interoperability with the U.S. justifies major procurement decisions, none more stark than the purchase of U.S. aircraft. SDSR 15 committed to 138 JSF

¹¹ Sky News US Team, "US General Concerned Over UK Military Spending," Sky News, <http://news.sky.com/story/1399893/us-general-concerned-over-uk-military-spending> (accessed December 29, 2015).

fighters, a further buy of 50 Apache helicopters, and 9 P-8 Orion MPAs. The U.S. also provided the Trident missiles for the nuclear deterrent and will provide the replacement. All these options are extremely costly, but purchasing off the shelf is in line with the 2012 Defence Industrial Strategy.¹² Furthermore, the experience of the delayed and remarkably expensive European Partnership that delivered the Typhoon fighter and Atlas transport aircraft does not serve as an example of a cheaper or more efficient option.¹³

That the major procurement decisions announced in SDSR 15 declared exact numbers of platforms constrained the MoD in a number of unhelpful ways. As explained in the economic section, fixed aircraft numbers apply financial pressure to successful pan-DLOD (Defence Lines of Delivery) procurement. Announcing numbers of platforms can be politically seductive, but an aircraft suffering from poorly supported pilots, weapons, and equipment vastly limits the true capability. Announcing the numbers of aircraft also hamstring any bargaining tools the MoD has with industry, which subsequently erodes the value for money, a quality strongly pursued by Levene in his recommendations for Defence Reform. Aircraft procurement announcements in SDSR 15 are another example of setting specific objectives, but not fully considering the impacts on resources, which creates the out of balance stool that risks national security. Short-sighted announcements that satisfy political assurances often harm a long term strategy that promotes national and MoD interests.

The problems of setting out a clear strategy are not new and the decision made to pursue CEPP differs markedly from the interwar decision on aircraft carriers. Geoffrey

¹² Ministry of Defence, *National Security Through Technology: Technology, Equipment, and Support for UK Defence and Security*, (The Stationary Office Limited: London, 2012),

¹³ Keith Hayward, "Smart Procurement: The European Dimension." *The RUSI Journal* 143, no. 2 (1998)04/01; 2015/09: 47-50.

Till identified a similar environment as seen today during his analysis of interwar adoption of the aircraft carrier.¹⁴ Till uses case studies about the adoption of aircraft carriers by Britain, America, and Japan to compare the varying degrees to which the countries recognized the carriers' strategic importance. Till's comparison of the three countries highlighted three important issues impacting the development of the carrier, similarly apparent today: the level of resources, uncertainty about the future threat, and, critically, the lack of centralized command and control.¹⁵ More recently, Porter echoed the point, arguing that the level of resources and uncertainty of threat faced explained why Britain does not do Grand Strategy.¹⁶ Porter clarifies his remarks to indicate that the UK lacks clear and transparent strategic planning. It could be argued that the critical element of centralized control has been maintained by keeping the strategic programs in the Head Office, but the lack of intellectual horsepower due to the reduced number of personnel diminishes the effectiveness of that role. Furthermore, the Services provide the separate elements of CEPP, and, as the previous chapter demonstrated, suffer the huge cost and time implications of strategy and policy incoherence. MoD's re-adoption of the shorter range F-35B Vertical Short Take-Off and Landing (VSTOL) version, when the essential element of catapult launch became unaffordable, provides the most powerful example.¹⁷ All of these issues point at the need for clearer and more decisive strategic guidance. Although the MoD Head Office has a part to play, the position of the NSC at

¹⁴ Geoffrey Till, "Adopting the Carrier: The British, American and Japanese case studies," Williamson Murray and Allan R. Millett, eds., In *Military Innovation in the Interwar Period* (United States: Cambridge Press, 2009), 191-226.

¹⁵ Ibid., 205-209.

¹⁶ Porter, "Why Britain Doesn't Do Grand Strategy," 7-8.

¹⁷ James Bosbotinis, "The Future of UK Carrier Strike." *The RUSI Journal* 157, no. 6 (2012)12/01; 2015/10: 10-17.

the nexus of the civilian/military interface provides an opportunity for generating coherent policy and strategy.

The UK NSC, in its infancy, has not learned the lessons from the U.S. NSC established in 1947. The American process of debate and natural political tension improved the role of the U.S. NSC over a long period of time. Unfortunately, the recent UK parliamentary debate focused on removing a struggling NSC, rather than improving it. The U.S. NSC is also protected by legislation, but the UK NSC is not, which weakens its legitimacy. The most important lesson learned emphasized the seduction of decision making to the tactical level. The U.S. NSC learnt this bitter lesson during the Vietnam War. The UK NSC, however, failed to heed the lesson when it made targeting decisions in Libya.¹⁸ A clearer definition of the UK NSC role to provide strategic guidance and decision making at the appropriate level, backed by protection in legislation, would make a key improvement in the UK's delivery of national security.

Summary: Strategy by Design

Clausewitz emphasized the importance of the relationship between the statesman and commander, which developed into modern layers of policy and strategy. Yarger's model illustrates the layers necessary for comprehensive strategy. The theorists espouse strategy, with prominent thinkers, Porter, Hayward, Chalmers, and Till, as well as military commanders all identifying the UK's lacks of comprehensive strategic planning as part of the problem.¹⁹ The need for the UK to specify and prioritize its national

¹⁸ Mark Phillips, Interview with Dr James D. Boys on 20 March 2012 quoted in: James Boys, "UK National Security in a Changing World: A Target Paper," *Intelligence Design*, (Bow Group, July 2012), 22.

¹⁹ Porter, "Why Britain Doesn't Do Grand Strategy," 10. Chalmers, "Mind the Gap: The MoD's Emerging Budgetary Challenge," 8. Hayward, "Smart procurement: The European dimension", 49. Till, "Adopting the Carrier: The British, American and Japanese case studies," 191-226. Deborah Prateley, "The National

interests more precisely sits outside Defence Reform, but remains an important political goal, which should be demanded by the MoD. The unspoken Grand Strategy of the UK is often pointed to as a reason for the UK's strategic struggle, but the very fact that the UK sits astride a delicate balance between nations and international organizations suggests that an unambiguous and overt declaration might be more problematic. The NSS stands out as an example of either a vision verging on a hallucination or bad strategy that requires more attention to ways and means to balance the risk to national security. Similarly, SDSR 15 focused on defining numbers of platforms, but intelligent crafting of a more generic document that provides the political assurances required to improve strategic partnerships would further reduce the risk. Overarching all levels of strategy sits the Head Office MoD and NSC. Defence Reform failed to recognize the impact of reducing the intellectual horsepower from the creators of strategy in Head Office and failed to understand the importance of interaction with a well-defined NSC to reduce national security risk. Protecting the MoD Head Office from civilian job cuts by focusing cuts on DE&S and increasing military posts in Whitehall by reorganizing would reinject that horsepower. Defence Reform could also be used as a forum to propose specific roles and responsibilities for the NSC that are protected by legislation.

Security Council – Proof the Britain Doesn't "Do" Strategy?" (master's diss, UK Joint Services Command and Staff College, 2014).

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

The wicked problem of Defence delivery drew political attention during a time of austerity when MoD capability planning exceeded the budget by £38Bn. To prevent the situation from reoccurring Lord Levene made recommendations for Defence Reform focusing on changes to the management and organization of the MoD. Levene limited the scope of his report by excluding the SDSR process, which aligns strategic end states with military ways and means. That decision ultimately undermined the intent to prevent reoccurrence of over programming when SDSR 15 announced a vast increase in aircraft numbers without a requisite increase in funding. The failure came from a focus on the symptoms rather than the root cause of the problem.

Delivery of incoherent strategic programs presents a considerable risk to national security. Strategic programs that constitute almost half of the equipment budget and that hold the biggest risks for delays and increased cost hold the potential to paralyze the budgets available to the Service Chiefs. The combination of encouraging Service Chiefs to spend less time in Head Office, decreasing the capability planning staff in the Head Office, and increasing the reporting burden on single Services removed intellectual horsepower from delivering coherent strategic programs. Organization of personnel, both civilian and military, should be restructured to strengthen MoD Head Office's role in delivering coherent strategic programs.

Changes in economic context require measured reaction by the MoD to coherently deliver Defence. Equipment and personnel constitute the two major funding levers of the MoD. Rapid changes to personnel levels and the failure to preserve

desirable competitive working conditions will cause the loss of experience and knowledge. The Service Chiefs' ability to protect their people, as a crucial element of Defence delivery, must be better institutionalized through Defence Reform. The key for equipment procurement is striking the right balance between speed and coherence; an ideal middle ground between the fast but incoherent UOR process and the slow unwieldy delivery of complex strategic programs. A long-term strategy implemented using faster processes, that are continually reviewed, would vastly improve Defence's ability to react to budgetary changes.

The interaction between political and military institutions at a strategic level must improve. Comprehensive strategic planning starts with the ability to specify and prioritize UK national interests precisely. An unspoken grand strategy should be accepted to preserve the delicate balance between nations and international organizations. The NSS stood out as requiring more attention to ways and means to balance the risk to national security. SDSR 15 gained political assurance by defining precise platform numbers rather than offering a more generic strategy that would have provided flexibility to the Service Chiefs. Head Office MoD and the NSC are the organizations that either provide or influence the valuable layers of policy and strategy. The MoD Head Office and the NSC should become centers of excellence to confront the lack of comprehensive policy and strategy, supported by the appropriate personnel and protected by legislation.

Contemporary reverence for strategy is sadly lacking. The impact of this was reflected by the strategic failure of Defence Reform, which boils down to a failure to prioritize strategy and a lack of understanding of how to institutionalize its practice and production. The military can no longer rely on genius commanders with *coup d'oeil*

alone, although these certainly help. Modern democracies direct and guide militaries through bureaucracy, therefore greater emphasis on supporting that process when organizationally reforming is key—a lesson not just for the military. Mechanisms for generating policy and strategy, such as NSS and SDSR 15, must be grounded with the personnel and organizations to implement them or else they become empty political exercises with overall negative consequences to national security.

Recommendations

The MoD requires an organizational foundation that promotes coherent strategic programs to enable balanced capability. Protected military personnel and streamlined procurement timescales enable successful Defence capability in turbulent environments. A center of excellence at MoD Head Office establishes a top-down approach to encourage comprehensive national strategy and policy in order to strengthen national security. Recommendations are:

- Strengthen MoD Head Office by restructuring military and civilian posts to support coherence of strategic programs.
- Improve institutionalized ability for Service Chiefs to protect pay and benefits for personnel.
- Develop faster procurement timelines by applying beneficial knowledge of UOR process without loss of coherence.
- Annually review and amend the procurement process using best practice.
- Define strategic roles and responsibilities for the NSC to the UK government.
- Develop and define strategic roles and responsibilities specifically for the production of documentation at MoD Head Office.
- Protect NSC and MoD Head Office roles and responsibilities through legislation.

The strategic failure of Defence procurement in Iraq and Afghanistan cost too many lives, though the relatively low intensity of these conflicts limited the total loss. The future appears no less threatening in an economically uncertain environment. The failure to implement these recommendations will, at best, continue the MoD risking an

unbalanced capability that unacceptably expends lives and misuses treasure. The worst case is that the MoD will risk national security by being unable to achieve the strategic aims of the NSS. An institutional culture that reveres strategy provides the beacon to address these risks and should guide the MoD, indeed the country as a whole. The UK Government has recognized the need for change on many occasions, most recently through Defence Reform, but the uncomfortable truth is that truly transformational reform is complex, difficult, and is not the exclusive responsibility of the MoD. The temptation to solve a complex and difficult problem by focusing on subsets of that problem is folly; the problem of Defence Reform must be attacked as a whole through the synergy of institutional components that generate strategy.

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VITA

Wing Commander Andy Beasant commissioned into the Royal Air Force in 1999 having been sponsored through the graduate entry scheme at the University of Sheffield. He earned his wings in 2001 as a helicopter pilot, has flown the Puma and Merlin operationally and is a Qualified Helicopter Tactics Instructor. He has served in Northern Ireland, Iraq and Afghanistan, completing a dozen tours, over half of which provided support to special operations. His most recent command was as Second in Command of 28 (Army Co-operation) Squadron. As a staff officer he has completed tours in the Ministry of Defence Main Building and then at Headquarters Air Command, where he was responsible for the procurement of Defensive Aids Suites for large fixed-wing, rotary, and fast jet aircraft across UK Defence. Wing Commander Beasant holds a Bachelor of Engineering Degree in Civil and Structural Engineering.